REMARKS

I. INTRODUCTION

Claims 11-30 are currently pending in the present application. Initially, Applicant would like to thank the Examiner for the allowance of claims 18, 20 and 21 and for indicating that claim 29 would be allowable if rewritten to include all limitations of the base claim and any intervening claims. As such, claim 29 has been rewritten in accordance with the Examiner's suggestion. It is respectfully submitted that the amendments to the claims have adequate support throughout the Specification and put claim 29 in allowable condition.

Otherwise, Applicant respectfully traverses all claim rejections for the reasons that follow.

II. REJECTIONS OF CLAIMS 22, 23 AND 30 UNDER 35 U.S.C. § 102(b)

Claims 22, 23 and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Norway Patent No. 76184("Naevestad et al."). Applicant respectfully submits that claims 22, 23 and 30 are allowable for the following reasons.

Claims 22 and 30 relate to a floor mop. Claims 22 and 30 recite a wringer slide having two wringer arms movably engageable with respective backs of carrier plates.

Naevestad et al. purportedly relate to a floor mop. Fig. 1 shows arms 4,6 fixedly connected to plates 11 by means of elements 9. Accordingly, Naevestad et al. do not disclose wringer arms movably engageable with respective backs of carrier plates, as recited in claims 22 and 30. Therefore, Naevestad et al. do not anticipate claims 22 and 30.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*,

814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Naevestad et al. do not disclose, or even suggest, wringer arms movably engageable with respective backs of carrier plates, as recited in claims 22 and 30. It is therefore respectfully submitted that Naevestad et al. do not anticipate independent claims 22 and 30.

Additionally, to reject a claim under 35 U.S.C. § 102, the Examiner must demonstrate that each and every claim limitation is contained in a single prior art reference. *See, Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Still further, not only must each of the claim limitations be identically disclosed, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the inventions of the rejected claims, as discussed above. *See, Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986). In particular, it is respectfully submitted that, at least for the reasons discussed above, the references relied upon would not enable a person having ordinary skill in the art to practice the inventions of the rejected claims, as discussed above. Also, to the extent that the Examiner is relying on the doctrine of inherency, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art." *See* M.P.E.P. § 2112 (emphasis in original); and *see, Ex parte Levy*,

17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, the anticipation rejection as to the rejected claims must necessarily fail for the foregoing reasons.

In summary, it is respectfully submitted that Naevestad et al. do not anticipate claims 22 and 30. It is therefore respectfully requested that the rejection of claims 22 and 30 under 35 U.S.C. § 102(b) be withdrawn.

As for claim 23, which directly depends from claim 22 and therefore includes all of the limitations of claim 22, it is respectfully submitted that Naevestad et al. do not anticipate this claim for at least the same reasons given above in support of the patentability of claim 22. Accordingly, withdrawal of the 35 U.S.C. § 102(b) of claim 23 is respectfully requested.

III. REJECTIONS OF CLAIMS 11, 13 TO 17, 19, 22, 23, 25 to 28 AND 30 UNDER 35 U.S.C. § 103(a)

Claims 11, 13 to 17, 19, 22, 23, 25 to 28 and 30 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 2,730,744 ("Vaughn") in view of U.S. Patent No. 3,224,025 ("Altrock"). Respectfully, Applicant traverses for the following reasons.

Claim 11, from which claims 13 to 17 and 19 ultimately depend, relates to a mop and recites a mop handle connected with a carrier center piece by way of a cardan joint. The Specification states that the cardan joint allows the center piece to pivot to all sides. See page 4, lines 32 to 36. Claim 22, from which claims 23 and 25 to 28 ultimately depend, relates to a mop and recites a joint arrangement configured to connect a mop handle to a carrier center piece and to permit the carrier center piece to pivot to all sides. Claim 30 relates to a mop and recites a means for connecting a

mop handle to a carrier center piece to permit the carrier center piece to pivot to all sides.

Vaughn purportedly relates to a mop. The Office Action admits that Vaughn does not disclose a handle coupled to a center piece via a cardan, as recited in claim 11, or a universal joint. The Office Action also admits that Vaughn does not disclose balls configured to rotate in respective recesses of the wringer arms. The Specification states that the cardan joint allows the center piece to pivot to all sides. See page 4, lines 32 to 36. Accordingly, Vaughn also does not disclose a joint arrangement configured to connect a mop handle to a carrier center piece and to permit the carrier center piece to pivot to all sides, as recited by claim 22, and a means for connecting a mop handle to a carrier center piece to permit the carrier center piece to pivot to all sides, as recited in claim 30.

Altrock purportedly relates to a scrubbing and polishing device including a handle 1, which is connected to a mop element 2 via a bracket 5 and a loop portion 8. See col. 2, lines 47 to 59. The loop portion 8 is disposed within a swivel cavity of the bracket 5 to accommodate swinging movement of the handle 1 in **a single plane.**
See col. 2, lines 59 to 62. Altrock does not disclose a cardon joint to connect the mop handle to the carrier piece, as recite in claim 11. Altrock also does not disclose a joint arrangement configured to connect a mop handle to a carrier center piece and to permit the carrier center piece to pivot to all sides, as recited by claim 22. Altrock further does not disclose a means for connecting a mop handle to a carrier center piece to permit the carrier center piece to pivot to all sides, as recited in claim 30.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima

facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

As stated above, Vaughn and Altrock fail to disclose, or even suggest, each and every feature of claims 11, 22 and 30. Specifically, Vaughn and Altrock do not disclose, or even suggest, a cardan joint to connect the mop handle to the carrier center piece, as recited in claim 11, a joint arrangement configured to connect a mop handle to the carrier center piece and to permit the carrier center piece to pivot to all sides, as recited in claim 22, and a means for connecting a mop handle to a carrier center piece to permit the carrier center piece to pivot to all sides and to prevent the carrier center piece from rotating, as recited in claim 30. Accordingly, claims 11, 22 and 30 are patentable over Vaughn in view of Altrock.

The Office Action references col. 4, lines 38 to 63 of Altrock and alleges that the handle of Altrock is mounted to the mop 2 by a "universal" connection. Applicant submits that Altrock's use of the word "universal" is misleading as loop portion 8 is disposed within a swivel cavity of the bracket 5 to accommodate swinging movement of the handle 1 in **a single plane only**. See Figure 2 and col. 2, lines 59 to 62.

The reference cited by the Office Action includes the following statement:

"In accordance with one feature of the invention, the leading edges 16 and 17 of the sponge 9 and of the backing plates 20 and 19, respectively, form the angular nose portion 18. This feature combined with the universal connection between the handle 1 and the working element 2 makes it possible to turn the mop on its side so that the surface 16 or the surface 17 lies against the floor along its entire length. When so disposed the sponge may lie alongside the wall board."

Nowhere in the above excerpt is there any indication that the universal connection allows carrier plates to move in more than one plane. It is only indicated that the "universal" connection facilitates using the mop in a situation where you want the sponge to lie alongside the wall board. Putting the sponge in this configuration does not require that the carrier plates be movable in more than one plane or even suggest that it may be desirable to have carrier plates movable in more than one plane.

The Office Action further alleges that Altrock's "universal" connection is provided to increase the maneuverability of the mop with respect to the handle. Applicant submits that this allegation is overly broad and that Altrock more accurately purportedly provides for a "universal" connection to allow for movement of the handle relative to the mop **in one plane**. Applicant submits that the fact that Altrock may provide a connection that allegedly increases the maneuverability of the mop in one plane does not render obvious or provide a suggestion to use a connection that allows for movement of the handle relative to the mop in more than one plane, to allow for motion of the mop head as shown, for example, in Figure 4 of the present invention.

Nowhere in either Altrock or Vaughn is there any suggestion or motivation to provide for a connection between the handle and mop head that allows for movement of the mop head in more than one plane. In the above excerpt Altrock does not state, or even suggest, that a mop-to-handle

connection allowing movement of the handle in more than one plane would facilitate using the mop in a situation where you want the sponge to lie alongside the wall board. Altrock only indicates that the connection he discloses, which only allows for movement in one plane, as well as the pointed shape of the mop, allows for this type of "alongside the wall board" use.

The Office Action further alleges that a universal joint could be provided for the mop of Vaughn between the handle and the mop head, as purportedly suggested by Altrock, to increase the maneuverability of the mop. Applicant submits again that the "universal" connection is not configured to connect a mop handle to carrier center piece and to permit the carrier center piece to pivot to all sides, as recited in claims 11 and 22, and does not qualify as a means for connecting a mop handle to a carrier center piece to permit the carrier center piece to pivot to all sides, as recited in claim 30. Therefore, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection and allowance of claims 11, 22 and 30.

As for claims 13 to 17 and 19, which ultimately depend on claim 11 and therefore include all of the limitations of claim 11, Applicant respectfully submits that these claims are patentable over Vaughn in view of Altrock for at least the same reasons provided above in support of the patentability of claims 11. As for claims 23 and 25 to 28, which ultimately depend on claim 22 and therefore include all of the limitations of claim 22, Applicant respectfully submits that these claims are patentable over Vaughn in view of Altrock for at least the same reasons provided above in support of the patentability of claim 22. Accordingly, allowance of these claims is respectfully requested.

Regarding claim 14 and amended claim 19, Applicant submits that these claims are allowable for the following additional reasons.

Claim 14 recites that the guide surface 17 decreases in height on the side of elevation 17b facing the free plate end 5a, towards the carrier plate 5. The cam 34 in Vaughn and elements 32 and 33 in Altrock are wedge-shaped and do not decrease in height on the side of the wedge elevation facing the free end of the carrier plate. Therefore, Applicant respectfully submits that claim 14 is patentable over Vaughn in view of Altrock.

Claim 19 has been amended to be placed in independent form and to recite ends 11a of wringer arms 11 having a pressure surface 16 with a convex curvature which can be brought into **direct contact** with guide surface 17 on the back of the carrier plate. Operating element 3 of Altrock contacts wedge-shaped elements 32 and 33 via rollers 28 and 29. Accordingly, Altrock does not disclose an arm having a convex surface which **directly contacts** wedge-shaped elements 32 and 33, as recited by amended claim 19. Vaughn discloses legs 49 which engage cam 34 via rollers 50. Accordingly, legs 49 do not **directly contact** cam 34, as recited by amended claim 19. Furthermore, neither Vaughn or Altrock provide a suggestion or motivation to eliminate the rollers and instead contact the respective sliding surfaces with a convex surface of a wringer arm. Therefore, Applicant submits that claim 19 is patentable over Vaughn in view of Altrock and allowance of this claim is respectfully requested.

In summary, it is kindly requested that the rejection of claims 11, 13 to 17, 19, 22, 23, 25 to 28 and 30 under 35 U.S.C. § 103(a) be withdrawn.

IV. ALLOWANCE OF CLAIMS 18, 20 AND 21

Applicant acknowledges and notes with appreciation the allowance of claims 18, 20 and 21.

V. CONCLUSION

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current Reply Under 37 C.F.R. §1.116. The attached page is captioned **"Version with Markings to Show Changes Made."**

Respectfully submitted,

KENYON & KENYON

Dated: April 23, 2003

By: _____
Richard L. Mayer
Reg. No. 22,490

One Broadway
New York, New York 10004
(212) 425-7200

CUSTOMER NO. 26646

26646
PATENT TRADEMARK OFFICE

Version with Markings to Show Changes Made

IN THE CLAIMS:

Claims 19 and 29 have been amended without prejudice as follows:

19. (Amended) A [The] floor mop [according to Claim 11,] comprising: two carrier plates connected to a common carrier center piece in jointed manner and which carry an absorbent mop covering, a mop handle affixed on the carrier center piece, and a wringer slide which is movable along the mop handle, the wringer slide having two rigid wringer arms, each of which is movably engagable with a back of one of the two carrier plates, wherein the mop handle (1) is connected with the carrier center piece (3) by way of a cardan joint (2), and ends (11a) of the wringer arms (11) can each be brought into direct contact with a guide surface (17) on the back of the carrier plate (5) assigned to them, in each instance, and the wringer slide (9) is guided on the mop handle (1) so that it cannot rotate;

wherein the end (11a) of each wringer arm (11) has a pressure surface (16) with a convex curvature.

29. (Amended) A [The] floor mop [according to Claim 26,] comprising:

a common carrier center piece;

two carrier plates connected to the carrier center piece;

a mop covering supported by the carrier plates;

a mop handle;

a joint arrangement configured to connect the mop handle to the carrier center piece; and

a wringer slide guideably moveable along the mop handle, the wringer slide having two wringer arms movably engagable with respective backs of the carrier plates; wherein the joint arrangement is configured to permit the carrier center piece

to pivot to all sides and is configured to prevent the carrier center piece from rotating;

wherein ends of the wringer arms carry respective rotating roller elements; and

wherein each of the roller elements includes a wheel having a circumference and a plurality of recesses arranged on the circumference to engage with at least one projection on the back of a respective one of the carrier plates.